

1. (Amended) Aqueous suspensions of insecticidally active compounds,
[characterized in that they comprise] comprising:

- a) 0.1 to 12.5% of a **solid** active compound applied as a coating
to an inorganic carrier having a particle size of 1 to 30 μm [and
bearing a coating of active compound],
- b) 2.5 to 10% [of formulation] auxiliaries,
- c) 62.5 to 97.4% of water,
- d) 0 to 15% of glycerol,

[the percentages are % by weight] of the suspension.

REMARKS

Claim 1, which is in the application, has been amended pursuant to the Examiner's suggestion. The claim as amended has overcome or avoided the standing rejection. Applicants discuss more fully hereunder the rejection and how they overcame or avoided them.

Claim 1 stands rejected under 35 USC 112, second paragraph as being indefinite in using term discussed hereunder. The claim also stands rejected under 35 USC 112, first paragraph as containing subject matter which was not described in the specification, in such a way as to enable one skilled in the art to which it pertains or with which it is most nearly connected to make and/or use the invention. The claim stands further rejected under 35 USC 102(b) as anticipated by or, in the alternative, under 35 USC 103(a) as obvious over Ackerman et al EP 0029626.

The 35 USC 112 second paragraph rejection has been overcome by the above amendments and by the following discussions addressing certain claim-recited terms with which the Examiner takes issue. First, the rejection is based on the grounds that "it is unclear if it is the actives, the suspended matter, or the whole aqueous suspension, that constitutes 0.1-12% carrier, auxiliaries, and water." To overcome this rejection, Applicants have amended the claim to recite more clearly that the active compound is present in an amount of 0.1 to 12%. Basis for the amendment is further found at page 3, lines 14-17 of the specification.

Secondly, the 35 USC 112 second paragraph rejection is based on the grounds that the claim-recited auxiliaries are not clearly identified, as it is unclear whether or not they remain as a part of the suspensions. In amending the claims to recite that the percent composition of the ingredients, including auxiliaries is based on the percent by weight of the suspensions, Applicants have clearly denoted that the auxiliaries remain part of the suspension.

Finally, the rejection is based on the grounds it is unclear what % active is actually present. As noted above, the amended claim recites that the active compound is present as 0.1 to 12% coating applied to a carrier. While some free active compound may be present, its presence will not appreciably affect the claim-recited suspension. See page 3, lines 17-20 of the specification, which states that "free active compound may be present depending on the conditions of manufacture, for example, as a result of abrasion. The amount of active compound applied to carriers and of free active compound may vary significantly with respect to each other". At any rate, even in the presence of the free active compound, it would be within the purview of the skilled artisan to make and use the claimed invention. In this regard Applicants direct the Examiner's attention to the working Examples which show how coating of the carriers with the active compounds and indicate the measure of free active compounds.

The 35 USC 112, first paragraph rejection is based on the grounds that "it is beyond the scope of one skilled in the insecticide arts to determine the required amount, concentration and ratio of ingredients, including actives, in order to arrive at, and practice the claimed invention - no basis is provided for identifying, for instance, the relative amounts (Example 1) of Al_2O_3 , and pyrethroid, free and /or coated." Applicants traverse the rejection because Example 1 at page 6 does teach how to prepare 11.8 gram of cyfluthrin coated on Al_2O_3 . The method preparation is disclosed at page 6, lines 10-14. Given the disclosure, including the examples, it would be within the purview of the skilled artisan to determine the required amount of concentration and ratio of ingredients including actives in order to arrive at and

practice the claimed invention. Applicants, therefore, pray for the withdrawal of the rejection.

Returning to the art rejections, Ackerman et al is cited for the proposition that it discloses:

"0.5-25 micron inorganic carrier are coated with pyrethroid insecticides with auxiliary dispersant at 0.1-30g/L of aqueous suspension - see Example 1,2-"B" in 2 is of the instant %."

Applicants traverse the 35 USC 102(b) rejection because the referenced and claimed invention are not substantially the same. A fair reading of Ackerman et al would show that it relates to suspensions of liquid or semi-solid pyrethroids coated on an inorganic organic carrier. In contrast, the claimed invention relates to solid active compounds coated on an inorganic carrier. In view of this difference, the claimed invention is not substantially the same as the referenced invention. Therefore, the claim is not anticipated by Ackerman et al. Since the difference here is not suggested by the prior art, the claimed invention is unobvious over the prior art.

Putting the claimed invention in the perspective of the state of the art may be helpful in appreciating the patentability thereof. The inventiveness of the cited reference resides in finding that the use of a coating technique enables a person skilled in the art to prepare suspensions of non-solid active compounds. In the case of solid active compounds, the art only teaches suspensions of the active compounds - without carriers in the manner of the claimed invention. By this invention, Applicants have shown that in coating the solid active compounds, one can obtain surprisingly better performance such as long term activity when compared to the usual suspensions. Applicants have presented the relevant comparative data at page -11 showing that the claimed invention is surprisingly better than the prior art suspensions. Applicants ask for a consideration of the comparative examples, In re Sernaker 217 USPQ 1 (Fed. Cir. 1983) in determining non-obviousness of the claimed invention.

In view of the foregoing discussions including the objective evidence of non-obviousness in the form of a comparative showing of surprisingly better results obtained with the claimed invention, the Examiner is justified in allowing the claims directed to the invention.

Respectfully submitted,

KIRKOR SIRINYAN
THOMAS BÖCKER
KLAUS MRUSEK
ULRIKE SCHNEIDER
RAINER SONNECK

By 

Godfried R. Akorli
Attorney for Applicants
Reg. No. 28,779

Bayer Corporation
100 Bayer Road
Pittsburgh, Pennsylvania 15205-9741
(412) 777-2340
FACSIMILE PHONE NUMBER:
(412) 777-5449
s:/sr/gra0067